



In Partial Fulfillment of the Requirements for the Degree of

**Master of Arts**  
**Lauren Withycombe**

Will defend her thesis

**Anticipatory Competence as a Key Competence in Sustainability Education**

**Abstract**

With the continued development of sustainability science as an academic endeavor, witnessed in both the establishment of new programs and the maturing of established programs, comes increasing pressure to define key competencies to guide curricula and measure student achievement. A comprehensive literature review on sustainability competencies, performed in the summer of 2009, revealed 5 competencies considered 'key' in sustainability education, namely: Systems Thinking Competence, Normative Competence, Anticipatory Competence, Strategic Competence, and Interpersonal Competence. The need still exists, however, to define the pragmatic content of these competencies. This paper defines the core pragmatic content of Anticipatory Competence and the contribution of that content to a students' ability to solve sustainability problems. The results of this literature review and synthesis indicate that students with Anticipatory Competence are those who can conceptualize and construct different kinds of futures; from multiple perspectives and considering the needs and values of stakeholders and future generations; assess those futures; communicate them meaningfully; and link all of the above to a decision-making processes that will produce real-world outcomes toward sustainability. Anticipatory Competence was chosen as the focus of this thesis because of both its prominence in founding sustainability literature and its under-representation in the literature on sustainability competencies. By defining what students need to learn to achieve Anticipatory Competence and why, this thesis is another in a series of important steps toward operationalizing sustainability education and enabling the transformation of students into change-agents during their time at university.

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Faculty, students, and the general public are invited.

Supervisory Committee:  
Dr. Arnim Wiek (Chair)  
Dr. Charles Redman (Member)  
Dr. George Basile (Member)